



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/072,681

DATE: 05/28/2002

TIME: 10:04:49

Input Set : A:\GENENT.037C3.TXT

Output Set: N:\CRF3\05282002\J072681.raw

ENTERED

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4 <110> APPLICANT: Burton, Louis E.
        Schmelzer, Charles H.
        Beck, Joanne T.
 8 <120> TITLE OF INVENTION: PURIFICATION OF NGF
11 <130> FILE REFERENCE: GENENT.037C3
13 <140> CURRENT APPLICATION NUMBER: 10/072,681
14 <141> CURRENT FILING DATE: 2002-02-08
16 <150> PRIOR APPLICATION NUMBER: 60/030838
17 <151> PRIOR FILING DATE: 1996-11-15
19 <150> PRIOR APPLICATION NUMBER: 60/047855
20 <151> PRIOR FILING DATE: 1997-05-29
22 <150> PRIOR APPLICATION NUMBER: 08/970865
23 <151> PRIOR FILING DATE: 1997-11-14
25 <150> PRIOR APPLICATION NUMBER: 09/363573
26 <151> PRIOR FILING DATE: 1999-07-29
28 <150> PRIOR APPLICATION NUMBER: 09/675,503
29 <151> PRIOR FILING DATE: 2000-09-29
31 <160> NUMBER OF SEQ ID NOS: 6
33 <170> SOFTWARE: FastSEQ for Windows Version 4.0
35 <210> SEQ ID NO: 1
36 <211> LENGTH: 242
37 <212> TYPE: PRT
38 <213> ORGANISM: Homo sapien
40 <400> SEQUENCE: 1
41 Pro Met Ser Met Leu Phe Tyr Thr Leu Ile Thr Ala Phe Leu Ile Gly
                                       10
                    5
43 Ile Gln Ala Glu Pro His Ser Glu Ser Asn Val Pro Ala Gly His Thr
45 Ile Pro Gln Val His Trp Thr Lys Leu Gln His Ser Leu Asp Thr Ala
                               40
47 Leu Arg Arg Ala Arg Ser Ala Pro Ala Ala Ala Ile Ala Ala Arg Val
                           55
49 Ala Gly Gln Thr Arg Asn Ile Thr Val Asp Pro Arg Leu Phe Lys Lys
                       70
                                           75
51 Arg Arg Leu Arg Ser Pro Arg Val Leu Phe Ser Thr Gln Pro Pro Arg
53 Glu Ala Ala Asp Thr Gln Asp Leu Asp Phe Glu Val Gly Gly Ala Ala
                                   105
55 Pro Phe Asn Arg Thr His Arg Ser Lys Arg Ser Ser Ser His Pro Ile
                               120
                                                   125
57 Phe His Arg Gly Glu Phe Ser Val Cys Asp Ser Val Ser Val Trp Val
59 Gly Asp Lys Thr Thr Ala Thr Asp Ile Lys Gly Lys Glu Val Met Val
```

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```
150
                                           155
60 145
61 Leu Gly Glu Val Asn Ile Asn Asn Ser Val Phe Lys Gln Tyr Phe Phe
                                      170
                  165
63 Glu Thr Lys Cys Arg Asp Pro Asn Pro Val Asp Ser Gly Cys Arg Gly
                                  185
              180
65 Ile Asp Ser Lys His Trp Asn Ser Tyr Cys Thr Thr His Thr Phe
          195
                               200
67 Val Lys Ala Leu Thr Met Asp Gly Lys Gln Ala Ala Trp Arg Phe Ile
                          215
                                               220
69 Arg Ile Asp Thr Ala Cys Val Cys Val Leu Ser Arg Lys Ala Val Arg
70 225
                       230
71 Arg Ala
75 <210> SEQ ID NO: 2
76 <211> LENGTH: 121
77 <212> TYPE: PRT
78 <213> ORGANISM: Homo sapien
80 <400> SEQUENCE: 2
81 Pro Ser Ser His Pro Ile Phe His Arg Gly Glu Phe Ser Val Cys
83 Asp Ser Val Ser Val Trp Val Gly Asp Lys Thr Thr Ala Thr Asp Ile
               20
85 Lys Gly Lys Glu Val Met Val Leu Gly Glu Val Asn Ile Asn Asn Ser
          35
                               40
87 Val Phe Arg Gln Tyr Phe Phe Glu Thr Lys Cys Arg Asp Pro Asn Pro
89 Val Asp Ser Gly Cys Arg Gly Ile Asp Ser Lys His Trp Asn Ser Tyr
                       70
91 Cys Thr Thr Thr His Thr Phe Val Lys Ala Leu Thr Met Asp Gly Lys
                  85
93 Gln Ala Ala Trp Arg Phe Ile Arg Ile Asp Thr Ala Cys Val Cys Val
              100
                                  105
95 Leu Ser Arg Lys Ala Val Arg Arg Ala
          115
                               120
99 <210> SEQ ID NO: 3
100 <211> LENGTH: 121
101 <212> TYPE: PRT
102 <213> ORGANISM: mouse
104 <400> SEQUENCE: 3
105 Pro Ser Ser Thr His Pro Val Phe His Met Gly Glu Phe Ser Val Cys
107 Asp Ser Val Ser Val Trp Val Gly Asp Lys Thr Thr Ala Thr Asp Ile
109 Lys Gly Lys Glu Val Thr Val Leu Ala Glu Val Asn Ile Asn Asn Ser
                                40
111 Val Phe Arg Gln Tyr Phe Phe Glu Thr Lys Cys Arg Ala Ser Asn Pro
113 Val Glu Ser Gly Cys Arg Gly Ile Asp Ser Lys His Trp Asn Ser Tyr
                                            75
                       70
115 Cys Thr Thr His Thr Phe Val Lys Ala Leu Thr Thr Asp Glu Lys
```

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Input Set : A:\GENENT.037C3.TXT

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90
116
117 Gln Ala Ala Trp Arg Phe Ile Arg Ile Asp Thr Ala Cys Val Cys Val
                                    105
                100
119 Leu Ser Arg Lys Ala Thr Arg Arg Gly
            115
120
123 <210> SEQ ID NO: 4
124 <211> LENGTH: 119
125 <212> TYPE: PRT
126 <213> ORGANISM: Homo sapien
128 <400> SEQUENCE: 4
129 Pro His Ser Asp Pro Ala Arg Arg Gly Glu Leu Ser Val Cys Asp Ser
131 Ile Ser Glu Trp Val Thr Ala Ala Asp Lys Lys Thr Ala Val Asp Met
133 Ser Gly Gly Thr Val Thr Val Leu Glu Lys Val Pro Val Ser Lys Gly
135 Gln Leu Lys Gln Tyr Phe Tyr Glu Thr Lys Cys Asn Pro Met Gly Tyr
137 Thr Lys Glu Gly Cys Arg Gly Ile Asp Lys Arg His Trp Asn Ser Gln
139 Cys Arg Thr Thr Gln Ser Tyr Val Arg Ala Leu Thr Met Asp Ser Lys
141 Lys Arg Ile Gly Trp Arg Phe Ile Arg Ile Asp Thr Ser Cys Val Thr
                                    105
                100
143 Leu Thr Ile Lys Arg Gly Arg
            115
147 <210> SEQ ID NO: 5
148 <211> LENGTH: 120
149 <212> TYPE: PRT
150 <213> ORGANISM: Homo sapien
152 <400> SEQUENCE: 5
153 Pro Tyr Ala Glu His Lys Ser His Arg Gly Glu Tyr Ser Val Cys Asp
155 Ser Glu Ser Leu Trp Val Thr Asp Lys Ser Ser Ala Ile Asp Ile Arg
157 Gly His Gln Val Thr Val Leu Gly Glu Ile Lys Thr Gly Asn Ser Pro
                                40
            35
159 Val Lys Gln Tyr Phe Tyr Glu Thr Arg Cys Lys Glu Ala Arg Pro Val
                            55
161 Lys Asn Gly Cys Arg Gly Ile Asp Asp Lys His Trp Asn Ser Gln Cys
163 Lys Thr Ser Gln Thr Tyr Val Arg Ala Leu Thr Ser Glu Asn Asn Lys
165 Leu Val Gly Trp Arg Trp Ile Arg Ile Asp Thr Ser Cys Val Ser Ala
                                    105
                100
167 Leu Ser Arg Lys Ile Gly Arg Thr
            115
171 <210> SEQ ID NO: 6
172 <211> LENGTH: 130
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| 173 | | | | | | | | | | - | | | | | | |
|-----|---------------------|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|----------------|-----|-----|
| | 174 <213> ORGANISM: | | | | - | | | | | | | | | | | |
| | 176 <400> SEQUENCE: | | | | 6 Thr Ala Pro Ala Ser Arg Arg Gly Glu Leu Ala Val | | | | | | | | | | | |
| 177 | Gly | Val | Ser | Glu | | Ala | Pro | Ala | Ser | | Arg | Gly | Glu | Leu | | Val |
| | 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| 179 | Cys | Asp | Ala | Val | Ser | Gly | Trp | Val | | Asp | Arg | Arg | Thr | | Val | Asp |
| 180 | | | | 20 | | | | | 25 | | | | | 30 | | |
| 181 | Leu | Arg | Gly | Arg | Glu | Val | Glu | | Leu | Gly | Glu | Val | Pro | Ala | Ala | Gly |
| 182 | | | 35 | | | | | 40 | | | | | 45 | | | |
| 183 | Gly | Ser | Pro | Leu | Arg | Gln | Tyr | Phe | Phe | Glu | Thr | Arg | Cys | Lys | Ala | Asp |
| 184 | | 50 | | | | | 55 | | | | | 60 | | | | |
| 185 | Asn | Ala | Glu | Glu | Gly | Gly | Pro | Gly | Ala | Gly | Gly | Gly | Gly | Cys | Arg | Gly |
| 186 | - | | | | | 70 | | | | | 75 | | | | | 80 |
| 187 | Val | Asp | Arg | Arg | His | Trp | Val | Ser | Glu | Cys | Lys | Ala | Lys | Gln | Ser | Tyr |
| 188 | | | | | 85 | | | | | 90 | | | | | 95 | |
| 189 | Val | Arg | Ala | Leu | Thr | Ala | His | Ala | Gln | Gly | Arg | Val | Gly | \mathtt{Trp} | Arg | Trp |
| 190 | | | | 100 | | | | | 105 | | | | | 110 | | |
| 191 | Ile | Arg | Ile | Asp | Thr | Ala | Cys | Val | Cys | Thr | Leu | Leu | Ser | Arg | Thr | Gly |
| 192 | | | 115 | | | | | 120 | | | | | 125 | | | |
| 193 | Arg | Ala | • | | | | | | | | | | | | | |
| 194 | | 130 | | | | | | | | | | | | | | |

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/072,681

DATE: 05/28/2002

TIME: 10:04:50

Input Set : A:\GENENT.037C3.TXT